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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/904,828	07/12/2001	Lup San Leong	CHRT-99186.DIV	7193
75	90 10/19/2004		EXAM	INER
WAGNER, MURABITO & HAO LLP			ELEY, TIMOTHY V	
Third Floor			ART UNIT	PAPER NUMBER
Two North Market Street San Jose, CA 95113			3724	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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	Application No.	Applicant(s)	
Office Astion Commons	09/904,828	LEONG ET AL.	
Office Action Summary	Examiner	Art Unit	
	Timothy V Eley	3724	
The MAILING DATE of this communication a Period for Reply	appears on the cover sheet w	ith the correspondence addre	SS
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply will, by sta Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no event, however, may a reply within the statutory minimum of this od will apply and will expire SIX (6) MOI tute, cause the application to become Al	reply be timely filed ty (30) days will be considered timely. NTHS from the mailing date of this commi BANDONED (35 U.S.C. § 133).	unication.
Status			
1)⊠ Responsive to communication(s) filed on <u>01</u> 2a)□ This action is FINAL . 2b)⊠ T 3)□ Since this application is in condition for allow closed in accordance with the practice under	his action is non-final. wance except for formal mat	• •	erits is
Disposition of Claims			
4) ☐ Claim(s) 40-47 is/are pending in the applica 4a) Of the above claim(s) 42 is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 40,41 and 43-45 is/are rejected. 7) ☐ Claim(s) 46 and 47 is/are objected to. 8) ☐ Claim(s) are subject to restriction and	n from consideration.	·	
Application Papers			
9) The specification is objected to by the Exam 10) The drawing(s) filed on is/are: a) a Applicant may not request that any objection to t Replacement drawing sheet(s) including the corr 11) The oath or declaration is objected to by the	accepted or b) objected to he drawing(s) be held in abeya rection is required if the drawing	nce. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documed 2. Certified copies of the priority documed 3. Copies of the certified copies of the papplication from the International Burn * See the attached detailed Office action for a line of the papplication for a line of the	ents have been received. ents have been received in A riority documents have beer eau (PCT Rule 17.2(a)).	Application No received in this National Sta	age
Attachment(s) 1) X Notice of References Cited (PTO-892)	A) 🗌 Interview :	Summary (PTO-413)	
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/Paper No(s)/Mail Date 	Paper No(s)/Mail Date Informal Patent Application (PTO-15	i2)

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 40,41, and 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ushio et al(6,102,775) in view of either Tolles(6,454,630) or Aiyer(6,248,000).
 - a. Ushio et al discloses a polishing apparatus comprising; a polishing platen(112); a polishing pad(113) overlying the polishing platen, the polishing pad having a first polishing region(to the left of the window(225) in figure 2 when turned clockwise 90 degrees), a second polishing region(containing the window 225), and a third polishing region(to the right of the window(225) in figure 2 when turned clockwise 90 degrees), wherein the second polishing region lies between first polishing region and the third polishing region; a carrier(114); and an alignment detector(118, position detection system which properly aligns the carrier over the window), wherein the alignment detector is used to align the carrier to the second polishing region(and over the window) of the polishing pad. See figure 2, column 4, lines 18-36, column 8, lines 1-3, lines 11-15, and

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lines 35-43. Applicant's broad recitation of first, second, and third polishing regions does not define over any polishing pad, since any polishing pad can be divided into regions.

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- b. Ushio et al do not disclose an alignment knob on the polishing platen.
- c. However, both Tolles and Aiyer disclose that it is well known in the art to attach a window(used as an alignment knob) to a platen in order to properly align a polishing pad to the platen. See figure 4, and column 6, lines 28-35 of Tolles. See figure 2, and column 5, lines 53-59 of Aiyer.
- d. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Ushio et al device by attaching the window to the platen as an alignment knob as taught by either Tolles or Aiyer in order to properly align the polishing pad to the platen.
- e. Regarding claim 41, the alignment detector comprises a laser.

 See column lines 43-45.
- f. Regarding claim 43, since a polishing pad inherently has a porosity(containing holes), the first, second, and third polishing regions have first, second, and third hole densities respectively.
- g. Regarding claim 44, the second hole density is greater than the first hole density and the second hole density, since the second hole density includes the window.
- h. Regarding claim 45, the first, second, and third polishing

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regions each comprises a plurality of holes having a hole depth and a hole width, since inherently in a porous pad, at least two holes in each region will have a depth and width essentially the same.

Allowable Subject Matter

3. Claims 46 and 47 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Cesna(6,142,857) discloses a platen having an alignment knob(see figures 4 and 5).
- 5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy V Eley whose telephone number is 703-308-1824. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N Shoap can be reached on 703-308-1082. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Timothy V Eley Primary Examiner Art Unit 3724

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